# **Integration of Sensor Video in High Fidelity Sims using Network Video Streams**

#### Mark A. Gieske

## **ABSTRACT**

Modern military aircraft often employ multiple visual sensors such as EO/IR Targeting Pods, NAVFLIR, and NVG. In a high fidelity simulation environment, these sensor channels are often rendered on dedicated image generator (IG) channels. The challenge is then how to integrate the output of these sensor IG channels together into the various cockpit displays required in the simulator. Traditional methods rely on expensive video switches and hardware blending in order to combine sensor video and symbology on the cockpit displays. This paper will discuss how network video streams could be used to blend the video for cockpit displays directly in software, thereby reducing the overall cost of implementation.

## **BIO**

### Mark A. Gieske

**Mark Gieske** is a research engineer for the Visual Systems group in the Training Systems and Government Services (TSGS) division of Boeing in St. Louis, Missouri. He has 18 years of experience developing embedded applications for various programs under TSGS. He has earned an MS degree in Physics as well as a BS in Physics and Mathematics.